

DEPARTMENT OF COMMERCE

BUREAU OF FISHERIES

Seattle



October 11, 1926.

The Commissioner of Fisheries,
Washington, D. C.

I herewith present a general report of fishing operations together with the Bureau's activities in the Alaska Peninsula District during the season of 1926.

Respectfully submitted,

A handwritten signature in cursive script, reading 'Samuel A. Stigard', is written over the typed name.

Assistant Agent

FOREWORD:

The salmon packing season of 1926 in the Alaska Peninsula District is an altogether outstanding one. The pack was unique in that it was the largest ever put up by operators in these waters. Also, notwithstanding the immense volume of the pack, the quality was up to the high standard set by the packers heretofore in this district. The year, in other words, was the very best from the standpoint of gain and financial advantage the operators there have had since fishing began in the Peninsula Region.

The cause of this large and fine pack is due to the strong, steady and long run of Migrating red salmon, followed by tremendous Local runs of dogs and humpbacks.

The season was also uncommon in its freedom from storms, there being only two or three flurries of wind which interfered but little with fishing operations. In the early part of the season, nevertheless, due to storms, considerable delay was experienced by the various operators in completing their traps in time for the salmon runs. But in the early days of June, with the advent of the first straggling fish of the oncoming runs, fine weather began and prevailed throughout the season.

BUREAU ACTIVITIES:

The Bureau of Fisheries, during the season, maintained throughout all the fishing areas of the Shumigan Islands and the Alaska Peninsula a comprehensive and effective patrol, guarding against violations of fishing regulations.

A close survey of the spawning areas of the regions named was also made, prohibitive monuments were properly placed at the mouths of all salmon streams and bays closed to commercial fishing.

Counting weirs, in addition, were installed in two of the most important streams on the southern side of the Alaska Peninsula, and records of the runs at these places secured.

CANNERIES OPERATED:

Six canneries were operated in the Alaska Peninsula District this season. One plant, the Shumigan Packing Company, located at Squaw Harbor, added a tall line of machinery to its equipment. The operating companies, the location of their plants and the pack of each follows:

Company	Location of Plant	Pack
Everett Packing Company	Herendeen Bay	23,500
Pacific American Fisheries	Ikatan Bay	97,000
" " "	King Cove	172,000
" " "	Port Moller Bay	37,500
P. E. Harris & Company	False Pass	111,500
Shumigan Packing Company	Squaw Harbor	160,500

SALMON RUNS:

The first run of salmon, which is also the Migrating run, appeared at its usual time during the early days of June. As usual the run struck the Shumigans in the vicinity of Kelly Rock first. A few days later it appeared at East Anchor Cove, and a week later in Morzhovoi and Ikatan Bays. The run remained strong for two weeks and during that time owing to moderate weather conditions operators made heavy catches. During the last days of June catches fell off heavily and by the middle of July practically no reds were present. After the Migrating run had passed, fishing was generally slack for a short time. About the middle of July, when the Migrating reds had passed, the dog salmon and humpbacks started to run, and at this stage of the run the catch was poor everywhere. The later part of July, however, found the dog salmon and humpbacks, bound for the Peninsula spawning areas, running heavily. This Local run of dog salmon and humpbacks, like the Migrating run of reds, was very strong and heavy catches were made by the canneries. It lasted at full strength through the middle of August. At about this juncture silvers appeared in fair numbers and by the last days of the month fishing operations had ceased. Due to the heavy runs referred to, all plants in the Peninsula District

secured unusually large packs. In fact the pack in the Peninsula Region this year, being the largest ever made, ran over the tremendous total of 600,000 cases.

The King Cove plant of the Pacific American Fisheries, with 173,000 cases, put up the largest pack in the district. The False Pass plant, of P. E. Harris & Company, secured the most reds, putting up 66,000 cases of this variety in their pack of 112,000.

MIGRATING SALMON:

The Migrating salmon, the catch of which enabled operators to make the record-breaking pack of this season, constitute in these waters, the runs bound for Bering Sea and points westward. These runs are made up largely of reds with scattering dogs and kings. They commence in early June and exhaust themselves in four or five weeks, with the advent of the Local runs.

CATCH STRAIN:

The catch strain placed on the Migrating and Local runs of the Peninsula Region this year was heavier than usual. Despite the long closed period and spiller regulations, the moderate weather conditions enabled the canneries to fish at full efficiency during open season with a few minor exceptions. Later in the season, when their catch should have dwindled greatly, lack of rain held the fish in the salt water away from the streams, which were too low to ascend, and this materially aided the traps and seiners in securing better catches. The intensity and duration of fishing operations and the transportation of fish from good districts to the less fortunate localities also increased the catch strain.

RUN CONSERVATION:

With traps now one statute mile apart, and the spiller regulation in effect, under normal conditions no trouble should be encountered in the matter of conservation of the migrating red runs.

The Local runs are more in danger of being impaired at the present time as fishing is carried on in closer proximity to the spawning grounds.

At the present time operations in the Alaska Peninsula are confined almost solely to the bays of the region. The Migrating runs do not penetrate into these bays to the extent that the Local runs do. For this reason it is necessary to regulate bay fishing in order that these Local runs may be protected. The sixty-hour closed season could be shortened to thirty-six after the middle of July without harming the Migrating runs. From July fifteenth to August fifteenth, with the thirty-six hour season in effect,

operations as carried on at present will not harm the Local runs, provided all fishing is suspended after the latter date until the first of September. Fishing for silvers could then be carried on by the local operators if desirable through the month of September.

The Local runs are strongest from the middle of July to the middle of August. Shortly after the middle of August, usually about the twentieth, Local runs slacken. Traps and seiners are by this time, taking fish which in many instances are not fit to can, and which are certainly not up to the standard set by the canneries in their earlier seasonal operations. In years like the present one, when the creeks were low and the fish could not ascend to the spawning grounds, considerable harm can be dealt the Local runs from this continued fishing.

STREAM IMPROVEMENT:

Stream improvement operations were conducted at every opportunity throughout the season, and all streams were visited by the Bureau's two patrol boats as often as time permitted and their condition required. Barriers, when located, were removed and much deepening of stream channels was done because of the dry season. Owing to the lack of frequent violent storms, the effects of this work were more lasting this season than usual, and much good resulted thereby. In Kinzaroff's Lagoon exceptional results were accomplished by stationing a man in the vicinity during the important part of the season. This is a red salmon lagoon, several small red salmon streams flowing into it. By deepening the channels where they spread and disappear in the sand, and through the removal of drift eel grass from their mouths, the streams were made more accessible to ascending salmon.

LAGOON FISHING:

Fishing in the lagoons of the Alaska Peninsula this season was very light. Only two lagoons in the district were fished. The biggest lagoon catch was made at Long John Lagoon in the lower end of Pavlof Bay. This lagoon was fished by Mr. A. Smith who secured about one hundred barrels of reds and sold them to Mr. Bradford, the superintendent of the Shumigan Packing Company.

A few fish were taken from Swanson's Lagoon, but owing to the good run generally and the difficulty experienced in getting in and out of that place, only a few trips were made there for fish.

SALMON ESCAPEMENTS:

In considering the matter of salmon escapement in the Alaska Peninsula, the Migrating run will not be included as this run is composed of Bristol Bay fish upon which estimates can be arrived at later. During the Migrating runs, however, a thorough patrol of the waters traversed by these Migrating salmon was maintained by the Bureau's patrol boats.

The escapement of salmon to the local streams was good. In most instances the streams would have absorbed a larger number of spawning fish, but owing to the low stage of the water the fish could not ascend. With the heavy rains of the latter part of August, all the fish off the stream mouths were able to reach the spawning grounds. Nevertheless, previous to that time, some damage was undoubtedly inflicted on the runs by beach seiners.

Thin Point Lagoon had a poor escapement if the statements of the probable escapement heretofore are to be compared with the weir count. To some extent this was caused by the low water and the hot weather which warmed the water in the lagoon so much that many fish perished on the flats. They appeared, on examination, to be perfectly healthy but their gills were as hard as rocks from being filled with silt carried into the lagoon by the Frosty Peak glacier stream. In the bay or in Thin Point Cove this milky water often extended over the greater part of the cove. Fish were observed near the edges of it but seemed reluctant to enter the muddy water.

Morzhovoi Lagoon had a good escapement as the weir tally shows. Conditions there were ideal throughout the season and a good count was obtained.

Fair numbers of red salmon also ascended into the spawning areas of Swanson's Lagoon, if reports from people who visited there can be credited. Time and weather conditions would not permit visiting that locality for an investigation of the spawning escapement.

In Kinzaroff's Lagoon a good escapement was reported by the watchman, who was tending the stream channels of the lagoon.

In the Shumigan region, the Orzenoi and Acheredin Bay streams enjoyed a good spawning escapement. Red Cove and Johnny Nelson's Lakes, especially the latter, were nearly barren of spawners.

The dog salmon and humpback streams along the mainland, northeast of the Shumigan Islands, being unworked by seiners were well seeded despite the low water. The streams of the Shumigan Islands did not fare so well however. Lack of water held off the fish and the seiners inflicted some damage.

Through the remainder of the Peninsula District the escapement generally was good. Pavlof Bay had a good spawning escapement and the streams therein were filled with humpbacks. In Volcano Bay the seeding was fair. More fish could likely have found spawning room but the deficiency was not great.

Belkofsky Bay had the poorest escapement. The fact that this bay lies close to the King Cove cannery was partially responsible for this, as the beach seiners from the plant had a much shorter run into Belkofsky Bay. When fishing slackened in the vicinity of Ikatan, the

False Pass cannery also sent a beach seine crew to Belkofsky Bay for several loads.

All the other streams of the district experienced either fair or good runs. Where the runs were slightly under normal it was due to the dry season and the resultant lack of water in the creeks. From King Cove westward it did not seem to be as dry as in the upper part of the Peninsula. More light storms and rain occurring but the runs of dog salmon and humpbacks are not as intense in that region and the escapement was in proportion.

SALMON WASTE:

There was no fish waste in the Alaska Peninsula region this season. While the run was very heavy, the nature of the closing regulations caused the packers to be scraping for fish by the end of each week.

PATROL:

During the season the waters of the Shumigan Islands and the adjacent peninsula waters were patrolled by the U. S. F. S. Merganser. The remaining waters of the region were systematically patrolled by the "Auk", a gas boat chartered for the purpose. The various traps, stream mouths and bays were visited during the weekly closed seasons and those areas entirely closed to commercial fishing were visited as often as time permitted.

TRAPS:

Twenty-five traps were operated in the Alaska Peninsula Area this year.

The Port Moller cannery, of the Pacific American Fisheries, operated four of the above number of which two were located in Nelson Lagoon, one in Moller Bay and the other below Bear River.

The Ikatan cannery of the same company operated five traps, four of which were located in Ikatan Bay and the remaining one just outside the bay below Ikatan Point.

P. E. Harris & Company of False Pass, operated four traps. Three of these were driven in Ikatan Bay and one in East Anchor Cove. An additional trap was finished in East Anchor Cove just before the close of the season by this company.

The Shumigan Packing Company, operating in the Shumigan Islands at Squaw Harbor, drove three traps. Two of these were driven in Popof Straits in the vicinity of Kelly Rock and the other in Unga Straits, near the Unga Sand Spit Light.

The King Cove cannery of the Pacific American Fisheries, operated the most traps of any plant in the region. They drove three in Morzhovoi Bay, one in Belkofsky Bay, one at Nickoloski Spit or Moss Point, two in Volcano Bay and two in Pavlof Bay.

The Everett Packing Company, in Herendeen Bay, was the only operator in the district who did not use traps for taking fish.

PURSE SEINES:

Ten purse seines were operated in the Alaska Peninsula this year, all in the Port Moller region.

Four half purse seines were operated this year, all in the Shumigan Islands and vicinity.

BEACH SEINES:

Several beach seines were operated in the Alaska Peninsula District the greater part of them being used by fox farmers and local residents for their local requirements.

Beach seines used for commercial purposes, their owners, the localities fished and the plant to which the fish were sold follow:

Location	Operated by	Sold to
Orzenoi River	Gus Lindquist	A. H. Bradford
King Cove & Vicinity	P. A. F.	King Cove Cannery
" " " "	Rev. Hotovitsky	" " "
False Pass & Vicinity	P. E. Harris	False Pass "
" " " "	Nick Kristen	" " "
" " " "	Morzhovoi Natives	" " "
Wosnesenski Island	A. Osterbeck	A. H. Bradford
Long John Lagoon	A. Smith	"

SALMON ENEMIES:

Wherever practicable war was waged on the natural enemies of the salmon. During the construction of the Thin Point weir the destruction of a goodly number of trout was accomplished with a small seine. Trout were also destroyed by the Bureau representative in Kinzaroff's Lagoon and the gulls and eagles scattered as much as possible. At the weir sites the watchmen also did everything in their power to protect the salmon from his natural enemies. Thin Point was perhaps the most harrassed by the enemies of the salmon. Numerous trout were seined there before the run and many gulls, tern and eagles shot throughout the season to protect the run.

Reference is made under the heading, "Salmon Escapement" in this report, of the silting of the gills of salmon in Thin Point Lagoon.

This condition was carefully observed at Thin Point this summer

and the following conditions prevailed: Frosty Peak, standing about four miles back from the lagoon, carries a fair sized glacier. A nameless glacial stream about three and one-half to four miles long leads the water of this glacier down to the lagoon. The glacier carries on its surface quite a residue of volcanic ash from nearby volcanoes. The warm days of the summer just passed, did record-breaking work---for that glacier, at least---in tearing down and melting away the glacier structure. There was rapid eroding and breaking up of a larger area of the glacier than usual, precipitating in the process, the silt into the stream. This silt was swept down into Thin Point Lagoon. This finely comminuted dust was held in solution by the water throughout the summer. As the water passes through the fish's gills a deposit of this ash slowly forms with a cement-like hardness. The fish has no way of ridding its gills of the silt or of stopping the accumulation and is slowly smothered to death.

PROHIBITIVE MONUMENTS:

Prohibitive monuments were placed five hundred yards from the mouths of all salmon streams in the Alaska Peninsula except Bear and Sandy Rivers, where they were set a mile from the mouth. The bays closed to commercial fishing were also marked with signs of a similar nature with the words, "within 500 yards of the mouth of this stream" omitted. Markers were also erected one at each entrance to False Pass with the notation, "Fishing with traps prohibited in the waters of False Pass", stenciled thereon.

RECOMMENDATIONS:

1-Additional facilities for maintaining an efficient patrol of all waters of the Alaska Peninsula Area.

2-Adoption of a seasonal closing date to protect the local runs.

3-Adoption of a closing order for Nelson Lagoon whereby,- Fishing should be prohibited in the waters of Nelson River and Lagoon above a line drawn from Lagoon Point in an easterly direction to a point opposite on the mainland shore at approximately 160 degrees and 20' west longitude.